

# Queensland **Clinical Senate**

*Connecting clinicians to improve care*

## **Queensland: the digital state**

**8-9 November 2018**

**Meeting report**

**Royal on the Park, Brisbane**

## Queensland Clinical Senate, Meeting Report

Published by the State of Queensland (Queensland Health), March 2019



This document is licensed under a Creative Commons Attribution 3.0 Australia licence. To view a copy of this licence, visit [creativecommons.org/licenses/by/3.0/au](https://creativecommons.org/licenses/by/3.0/au)

© State of Queensland (Queensland Health) 2019

You are free to copy, communicate and adapt the work, as long as you attribute the State of Queensland (Queensland Health).

For more information contact:

The Queensland Clinical Senate, email [qldclinicalsenate@health.qld.gov.au](mailto:qldclinicalsenate@health.qld.gov.au) phone 07 3328 9188. An electronic version of this document is available at:

<https://clinicalexcellence.qld.gov.au/priority-areas/clinician-engagement/queensland-clinical-senate/meetings/qld-digital-state>

### Disclaimer:

The content presented in this publication is distributed by the Queensland Government as an information source only. The State of Queensland makes no statements, representations or warranties about the accuracy, completeness or reliability of any information contained in this publication. The State of Queensland disclaims all responsibility and all liability (including without limitation for liability in negligence) for all expenses, losses, damages and costs you might incur as a result of the information being inaccurate or incomplete in any way, and for any reason reliance was placed on such information.

## Chair's report



Queensland is in the middle of one of the largest digital programs—the largest we will see in healthcare and probably one of the largest in the country. It is an exciting yet challenging time for clinicians as we rethink the way we practice and the way we interact with our patients and their families. Such change can be confronting but it is vital that we embrace it now and take the opportunity to influence decisions and shape policy to ensure digital change leads to improved quality of care for our patients.

The Senate's digital health meeting had two objectives. The first was for clinicians to understand what digital transformation is and the possibilities it avails. Digital transformation doesn't end with the implementation of integrated electronic Medical Record (ieMR) in our hospitals—ieMR is a horizon one investment, a platform that allows us to enter the digital space. From there on in – horizons 2 and 3 – the possibilities are endless. We are reimagining the way we provide healthcare and we are truly only limited by our imaginations. We will need to be patient and resilient though because we know that the foundational elements don't instantaneously transform the way we deliver our health care and we know that it could be challenging at times. But what we are beginning to hear from our colleagues is that they can now do things they never dreamed they could do. Benefits come if we are patient and start to use the capability down the track. We have a responsibility to carry that message and maintain the focus on why we are doing this.

The second objective of the meeting was to develop a clinical digital charter of clinical requirements for information and digital technologies for Queensland Health. The idea is that a charter developed by clinicians will be used to inform decision-making to ensure that digital technology improves the quality of care delivered to patients. The draft content of the charter was created in real time at the meeting with the guidance and support of more than 150 clinicians, consumers, carers and senior health administrators. I am really proud of the document and look forward to seeing it in action as the roll out of digital health gains momentum across the state. You can read the charter by clicking:

<https://clinicaexcellence.qld.gov.au/priority-areas/clinician-engagement/queensland-clinical-senate/meetings/qld-digital-state>.

Queensland is in a unique position rolling out a universal platform for a digital health record across our public hospital system. Colleagues around the world are watching with keen interest and a degree of envy. I look forward to seeing where it can take us.

Dr David Rosengren  
**Chair, Queensland Clinical Senate**  
**2013 - 2018**

## Overview

Queensland is leading the way in digital transformation. By the end of 2020, 80 per cent of Queenslanders will receive healthcare in digitally advanced acute public hospitals, transforming healthcare across the state.

- Eight acute healthcare facilities have been successfully transformed into fully digital hospitals.
- More than 30% of Queensland hospital beds are digital.
- By the end of June 2019, a further 7 healthcare facilities will become digital hospitals\*.
- And by 2020, Queensland will have 27 digital hospitals.

Source: eHealth Queensland

\* A digital hospital is a hospital service facility with highly connected, interactive digital information systems that support precise, informed treatment of individual patients / clients while enabling optimally efficient use of infrastructure (eHealth Queensland).

## The three horizons of digital transformation

Digital transformation occurs in three simultaneous phases known as horizons. Understanding these horizons is vital to any conversation about digital transformation as it enables us to appreciate the possibilities and capabilities of data and technology.

**Horizon 1** – The early foundation work including hardware, wireless networks and software, such as the integrated electronic Medical Record (ieMR), to support us with our daily interactions with individual patients.

**Horizon 2** – Building on the foundational elements, horizon 2 gives us the opportunity to use data from ieMR in real time to inform the way we deliver care to broader groups of patients.

**Horizon 3** – Takes full advantage of technology and moves us beyond the current realms of opportunity with robotics and artificial intelligence.

## The Senate meeting

If clinicians are to influence how the technical capabilities of digital health are used, it is imperative they embrace the change and join the conversation. The Queensland Clinical Senate meeting brought clinicians from across the state together to better understand the opportunities that digital health brings and produce a clinical digital charter that outlines the clinical requirements of digital technology.

## Strategic resources

### Advancing health 2026

[https://www.health.qld.gov.au/\\_data/assets/pdf\\_file/0025/441655/vision-strat-healthy-qld.pdf](https://www.health.qld.gov.au/_data/assets/pdf_file/0025/441655/vision-strat-healthy-qld.pdf)

### Queensland Health's Digital Health Strategic Vision 2026

[https://www.health.qld.gov.au/\\_data/assets/pdf\\_file/0016/645010/digital-health-strat-vision.pdf](https://www.health.qld.gov.au/_data/assets/pdf_file/0016/645010/digital-health-strat-vision.pdf)

### Digital1st: The Queensland Government digital strategy for 2017-2021

<https://digital1st.initiatives.qld.gov.au/documents/digital-strategy.pdf>

## Key messages

### Carolyn & Bill Wharton, health consumer representatives



'The only thing that frightens me about the digital transformation is whether care will remain patient-centred. Will clinicians forget to include the patient because they have all of the information in front of them and start making decisions forgetting what the patient's goal is? It must always come back to the patient, their carer and family and what their wishes are. What excites me about the potential of digital healthcare is safer, more timely care and a holistic view of the patient.'

### Dr Richard Ashby, Chief Executive, eHealth Queensland



'The foundational work is not the answer in itself – it's what you get out of those systems that is the transformational piece.'

### Professor Keith McNeil, Assistant Deputy Director-General, Chief Clinical Information Officer, Clinical Excellence Queensland



'Medicine has always been delivered with a clinician sitting down interacting with a patient. That is the fundamental construct that we practice medicine by and it always will be. That's never going to be replaced by a robot. We have to honour that and make sure that interaction can work really well each and every time and that is about getting information to that point of care for good decision-making. When we lock information away in paper records and don't enable it to be moved around, clinicians don't have the right information to make the right decisions at that point of interaction.'

### Dr Stefan Hajkowicz, Director, CSIRO Data 61 Strategic Insight Team



'The end point of the digital transformation of Queensland Health is a human being and that's where I think the focus has to be primarily. It's not about the digital technologies – if done well they will become invisible.'

## **Dr Stephen Duckett, Health Program Director, Grattan Institute**



'With data linkage coming along, we are going to be able to do so much more than we have done in the past with management technology. There is now a much better understanding of how we can use data. There are now ways to compare information about efficiency of hospitals and, measure, what I call, questionable care. Putting that information in the hands of GPs, managers and funders is going to be particularly important.'

## **Associate Professor Bruce Chater, Chair, Statewide Rural and Remote Clinical Network**



'No-one is going to be left behind in this – we intend to do it properly for rural and remote Queenslanders.'

## **Dr Dinesh Palipana, Resident Medical Officer, Gold Coast University Hospital and Adjunct Research Fellow, Griffith University**



'We are at a really interesting time where there is no real limitation in technology - we are just limited by our imaginations with what we can do with it. We just need to start using it and start using our imaginations to do some interesting things.'

## **Professor Robert M Wachter, Chairman, Department of Medicine, University of California and author of 'The Digital Doctor'**



'Among the things we have learned in the US that have been useful are that the centrality of clinician engagement cannot be overstated and this does not happen naturally unless you have a number of people who are trained and respected clinicians and trained in the informatics world. This turns out to be crucial to getting it right. We also learned to expect unanticipated consequences.'

## Meeting presenters and panellists

- Dr Richard Ashby, Chief Executive, eHealth Queensland
- Mr Sean Birgan, Director of Nursing, Division of Surgery, Princess Alexandra Hospital, Metro South Hospital and Health Service
- A/Prof Bruce Chater, Chair, Statewide Rural and Remote Clinical Network
- Dr Alex Cottle, Staff Specialist Anaesthetist, Mackay Hospital and Health Service
- Dr Stephen Duckett, Health Program Director, Grattan Institute
- Dr Stefan Hajkowicz, Director, CSIRO Data 61 Strategic Insight Team
- Russell Hart, Senior Director, Digital Application Services, eHealth Queensland
- Dr Alexander Kochi, Emergency Physician, Cairns base Hospital, Cairns and Hinterland Hospital and Health Service
- Professor Keith McNeil, Assistant Deputy Director-General and Chief Clinical Information Officer, Clinical Excellence Division
- Ms Lisa Knowles, Chief Digital officer, Children's Health Queensland
- Dr Dinesh Palipana, Resident Medical Officer, Gold Coast University Hospital and Adjunct Research Fellow, Griffith University
- Ms Kerry Porter, Diabetes Nurse Practitioner, Princess Alexandra Hospital, Metro South Hospital and Health Service
- Ms Naomi Scott, Registered Nurse, Post Anaesthetics Care Unit, Mackay Base Hospital, Mackay Hospital and Health Service
- Dr Clair Sullivan, Chief Digital Health Officer, Metro North Hospital and Health Service
- Professor Robert M. Wachter, Chair, Department of Medicine, University of California
- Ms Carolyn Wharton, Healthcare consumer representative

## Meeting organising committee

- Adam Brand, Clinical Director Digital Transformation, Gold Coast Hospital and Health Service ☐
- Anthony Brown, Director of Medical Services, Torres and Cape Hospital and Health Service ☐
- Dr Bruce Chater, Chair, Statewide Rural and Remote Clinical Network
- John Dick, Clinical Director Internal Medicine, Townsville Hospital and Health Service ☐
- Professor Keith McNeil, Assistant Deputy Director-General and Chief Clinical Information Officer, Clinical Excellence Division
- Dr Clair Sullivan, Chief Digital Health Officer, Metro North Hospital and Health Service
- Dr David Rosengren, Emergency Physician and Chair, Queensland Clinical Senate
- Dr Andrew Staib, Emergency Department Deputy Director, Metro South Hospital and Health Service, Co-Director Healthcare Innovation and Transformation Excellence Collaboration, Co-Chair, Digital Health Improvement Network
- Danielle Stowasser, Electronic Medication Management Program Director, Metro North Hospital and Health Service
- Narelle Doss, A/Chief Digital Strategy Officer ☐
- Renea Collins, integrated electronic Medical Record (ieMR) Clinical Director, ieMR Centre of Excellence
- Sean Birgan, Nursing Director, Division of Surgery, Metro South Hospital and Health Service ☐
- Shireen Lazaro, Coordinator, Statewide Rural and Remote Clinical Network
- Tim Lyons, Coordinator, Digital Health Improvement Network

# Queensland Digital Clinical Charter



Queensland is in the middle of one of the largest digital health programs we will see in healthcare and probably one of the largest in Australia.

As the rollout continues and the impact on patient care is realised, it has become increasingly evident that clinicians must influence the digital health agenda and be central to decision-making. The Queensland Digital Clinical Charter has been created to guide this process.

As a reference point for all digital health programs, the Charter aims to ensure that clinician and consumer needs are met and that digital healthcare investment truly improves the delivery of care.

In partnership with clinicians, consumers and managers, The Queensland Clinical Senate developed the Charter to:

- Clearly outline the digital health needs of clinicians to ensure the best outcomes for patients
- Inform and calibrate digital health projects
- Support decision making from a clinical perspective at each stage of the digital program.

The Charter was developed at the Senate's November 2018 Digital Health meeting and distributed widely for consultation. It has been endorsed by the Senate Executive and the Queensland Health System Leadership Team in February 2019.

## Foundational principles for clinical digital transformation

- Our consumers and clinicians are at the centre of the digital ecosystem
- Systems are integrated across the continuum of care (e.g. hospitals, primary care, aged care)
- Information collected spans the different domains of clinical data acquisition (e.g. clinical notes, investigation results, medical devices, patient notes)
- Devices are appropriate, functional and fit for purpose
- Training is multimodal, inclusive and contextually specific
- Infrastructure including bandwidth is adequate across the spectrum of care e.g. devices, medical grade Wi-Fi
- Security is strong
- Constant improvement of the system occurs and the prioritization of this improvement is clinically driven
- There is a clear single source of truth for data, source of truth is clinically driven
- There is strong clinical governance
- Ergonomics and user experience are integral to solution design
- User experience informs design



# Queensland Digital Clinical Charter

## Horizon One: digital basics

---

- Software systems will be intuitive (e.g. minimal logins and voice recognition)
- Mobility is enabled as appropriate (e.g. Follow Me desktop, BYOD)
- Clinical results reporting is governed and transparent
- There is a standardised approach to data entry with consistent data definitions and workflows across all sites
- All clinical and administrative information is coded using national standards
- Closed loop medication management is enabled
- Clinical decision support is
  - Evidence based and regulated for consistency
  - Customisable for maximum impact and to minimise alert fatigue

## Horizon Two: leveraging digital data for the clinical teams caring for the patients

---

- There is development of a clinical informatics workforce skilled in all stages of the data cycle
- Appropriate data is collected as part of routine clinical care without additional effort required
- Systems and solutions can be integrated real-time to facilitate data analytics and business intelligence supporting intelligence-driven decision-making
- Development and monitoring of quality metrics including patient reported outcomes and experiences (PROMS and PREMS respectively)
- All systems have inbuilt end user query tools for reporting
- Analytics is an integral part of software rollout
- A streamlined appropriate consent for data to be used in clinical research is developed
- Information is appropriately managed and governed
- There is a greater level of access to, and transparency of personal health records supporting enhanced individual health literacy and greater patient involvement

## Horizon Three: new models of care

---

- Our workforce is ready and skilled for new models of care
- Virtual interaction between clinicians and patients is enabled, facilitating equivalent clinical experience for both clinician and patient regardless of modality
- There is a focus on large data sets informing the care of individuals
- Analytics moves from descriptive to predictive to prescriptive and the model of care moves from break/fix towards predict/prevent
- Artificial intelligence is an iterative, transparent tool to support patient care and improve outcomes
- New hardware such as wearables, smart devices, drones and robotics are harnessed to achieve our clinical aims
- True clinical outcomes improvement is more important than innovation



This page intentionally left blank